

Date: Thu, 23 Sep 93 17:00:30 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1132
To: Info-Hams

Info-Hams Digest Thu, 23 Sep 93 Volume 93 : Issue 1132

Today's Topics:

 ARLB098 FCC call sign update
SUMMARY: Motorola MICOR and MITREX modifications, crystals, etc.
 Weekly Solar Terrestrial Forecast & Review for 24 September

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 22 Sep 1993 23:19:50 GMT
From: library.ucla.edu!agate!usenet.ins.cwru.edu!news.ecn.bgu.edu!
feenix.metronet.com!marcbg@network.ucsd.edu
Subject: ARLB098 FCC call sign update
To: info-hams@ucsd.edu

SB QST @ ARL \$ARLB098
ARLB098 FCC call sign update

ZCZC AG40
QST de W1AW
ARRL Bulletin 98 ARLB098
>From ARRL Headquarters
Newington CT September 16, 1993
To all radio amateurs

SB QST ARL ARLB098
ARLB098 FCC call sign update

The following is a list of the FCC's most recently issued call signs

as of September 1.

District	Group A Extra	Group B Advanced	Group C Tech/Gen	Group D Novice
0	AA00R	KG0HW	N0YJG	KB0LLM
1	AA1HG	KD1QU	N1QBM	KB1BDK
2	AA2PI	KF2QV	N2WEQ	KB2QOE
3	AA3FS	KE3JR	N3QAO	KB3AYE
4	AD4JB	KR4BL	++	KE4FBE
5	AB5PD	KJ5PJ	++	KC5CNE
6	AB6VY	KN6QI	++	KE6AOT
7	AA7YG	KI7QS	++	KB7YBV
8	AA8MD	KG8DQ	++	KB8PKS
9	AA9ID	KF9RF	N9URQ	KB9IUZ
Hawaii	++	AH6NC	WH6OQ	WH6CQV
Alaska	++	AL7PF	WL7MO	WL7CHF
Virgin Is.	WP2B	KP2CC	NP2GQ	WP2AHU
Puerto Rico	++	KP4VQ	++	WP4MJF

++ All call signs in this group have been issued in this area.

NNNN

/EX

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Marc B. Grant, N5MEI | marchbg@metronet.com | 214/231-3998 (voice)

P.O Box 850472 | marchbg@esy.com | 214/231-0025 (fax)

Richardson, TX 75085 |

"A billion here, a billion there, it starts to add up to real money" - HL Hunt

Date: 23 Sep 1993 23:37:02 GMT

From: nothing.ucsd.edu!brian@network.ucsd.edu

Subject: SUMMARY: Motorola MICOR and MITREX modifications, crystals, etc.

To: info-hams@ucsd.edu

Golly, I must be doing something wrong. To duplex a Mitrek, I just clip out CR1, CR2, and CR403, and add a new antenna jack for the receiver.

If you send the old channel element to International Crystal, they'll load a new crystal into it and recompensate it for you. If you live in California, where the weather is mild, as I do, you can just order the crystal and stuff it into the element yourself a lot cheaper.

9600 bps packet on a Mitrek works just fine. Using a K9NG or TAPR modem, pick the rx data off pin 11 of the control cable connector, same as you would for a voice repeater. Clip the resistor from the splatter

filter to the channel element, and shove the transmit data into the channel element modulation input directly. (I do it through pin 18 on the control connector, which is not otherwise used.)

Takes about a hour, including tuneup. The only hard part is getting the new antenna jack mounted and wired into the radio cover.

A thermostatically-controlled muffin fan is a real good idea if long winds are going to be gassing on it, or you're using it in data service.

One thing to watch for is spurs from the TX multipliers getting into the RX. I've never had it happen in a dozen or so repeaters I've built, but a friend claims it happened to him. Your mileage may vary.

- Brian

Date: 23 Sep 93 23:07:14 GMT
From: news-mail-gateway@ucsd.edu
Subject: Weekly Solar Terrestrial Forecast & Review for 24 September
To: info-hams@ucsd.edu

--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
September 24 to October 03, 1993

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

!!*!*!*!* NOTE *!*!*!*!*!*

Version 2.00a of our Professional Dynamic Auroral Oval Simulator is now available. Completely rewritten, this software now produces numerous types of map projections centered on any geographical location, including OBLIQUE AZIMUTHAL EQUIDISTANT maps where radio signal paths are projected as straight lines. Precise DMSP Satellite Observations of Auroral Activity characteristics are also plottable for any hour of any day from December 1983 to 1992, making this the most extensive and contiguous database of auroral activity observations presently available. Valuable for radio communicators, aurora photographers, and astronomers. The software is now Windows 3.x compatible and will operate under either Mouse or Keyboard control. Many additional features are also included. Contact Oler@Rho.Uleth.CA, or COler@Solar.Stanford.Edu for more information or call our computer BBS at (403) 756-3008. A recorded message containing additional information is also available at: (403) 756-2386.

*!***** NOTE *****

SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE

10-DAY SOLAR/RADIO/MAGNETIC/AURORAL ACTIVITY OUTLOOK

	10.7 cm	HF Propagation							+/-	CON				SID				AU.BKSR				DX	Mag	Aurora			
	SolrFlx	LO	MI	HI	PO	SWF	%MUF	%	ENH	LO	MI	HI	LO	MI	HI	%	K	Ap	LO	MI	HI			LO	MI	HI	
--	-----	-----								-----				-----						----	-----						
24	080	G	G	P	P	15	-15	65	15	NA	NA	NA	02	20	30	30	4	20	NV	NV	MO						
25	082	G	G	F	F	20	-10	70	20	NA	NA	NA	01	15	25	30	3	15	NV	NV	MO						
26	085	G	G	F	F	20	-10	70	20	NA	NA	NA	01	10	20	30	3	12	NV	NV	LO						
27	085	G	G	F	F	20	-05	70	20	NA	NA	NA	01	05	15	35	2	10	NV	NV	LO						
28	085	G	G	F	F	20	-05	70	20	NA	NA	NA	01	05	15	35	2	10	NV	NV	LO						
29	087	G	G	F	F	20	-05	65	20	NA	NA	NA	02	15	25	35	3	12	NV	NV	MO						
30	087	G	F	P	P	20	-25	65	20	NA	NA	NA	05	30	40	25	5	30	NV	LO	MO						
01	083	G	F	P	P	15	-20	65	15	NA	NA	NA	04	25	35	25	4	25	NV	LO	MO						
02	080	G	G	P	F	10	-15	65	10	NA	NA	NA	03	15	25	30	4	22	NV	NV	MO						
03	080	G	G	F	F	10	-10	65	10	NA	NA	NA	02	15	25	30	3	15	NV	NV	LO						

DEFINITIONS:

Date (day only)

10.7 cm SOLar radio FLuX forecast

HF Propagation Conditions for LOW, MIDDLE, HIGH, and POLAR areas (see below)

HF Short Wave Fade Probability (in %)

HF Maximum Usable Frequency in +/- percent above seasonal normals.

HF Prediction CONFidence Level (in %)

VHF Sudden Ionospheric ENHancement Probs (in %), weighted for low-mid lats

PROBability of "s"poradic E (Es) during the UT day for low, mid and high lats

VHF AUroral BackScatter Probs (in %) for LOW, MIDDLE and HIGH Latitudes

VHF Overall Global DX Potential (in %) - weighted for Low and Middle latitudes

Geomagnetic Activity Kp Index (peak value - see below)

GeoMAGnetic Activity Ap Index (peak value - see below)

AURORAL Activity for LOW, MIDDLE and HIGH Latitudes (see below)

HF Prop. Quality rated as: EG=Extremely Good, VG=Very Good, G=Good, F=Fair, P=Poor, VP=Very Poor, EP=Extremely Poor.

Probability of Sporadic E (Es) for the various latitudes is given in percent.

Kp Planetary Index rated: 0=V.Quiet, 1=Quiet, 2=Unstld, 3=Active, 4=V.Active, 5=Minor Storm, 6=Major Storm, 7=Maj-Sev Storm, 8=Severe Storm, 9=V.Severe.

Ap Planetary Index rated: 0-7=Quiet, 8-16=Unstld, 17-29=Active, 30-49=Minor Storm, 50-99=Major Storm, Severe Storm >=100.

Auroral Activity rated: NV=Not Visible, LO=Low, MO=Moderate, HI=High, VH=Very High.

PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (24 SEP - 03 OCT)

EXTREMELY SEVERE												HIGH
VERY SEVERE STORM												HIGH
SEVERE STORM												MODERATE
MAJOR STORM												LOW - MOD.
MINOR STORM							*					LOW
VERY ACTIVE	**						***	**	*			NONE
ACTIVE	***	**	*			*	***	***	***	**		NONE
UNSETTLED	***	***	***	**	**	***	***	***	***	***		NONE
QUIET	***	***	***	***	***	***	***	***	***	***		NONE
VERY QUIET	***	***	***	***	***	***	***	***	***	***		NONE

Geomagnetic Field	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		Anomaly
Conditions	Given in 8-hour UT intervals											Intensity

CONFIDENCE LEVEL: 70%

NOTES:

Predicted geomagnetic activity is based heavily on recurrent phenomena. Transient energetic solar events cannot be predicted reliably over periods in excess of several days. Hence, there may be some deviations from the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY

82										J	
78										J	
74										J	
70										J	
66			J							J	
62			J							J	
57			J							J	
53			J							J	
49			J							J	
45			J							J	
41			J							J	
37			J							J	
33			JM				M			J	
29			JM				MM			JM	
25			JM				MM			JM	
21	A		JM				MM			JM	
16	AAA		JMA		A		MM			JMA	A

12		U	AAAA	JMAU	A	MM	JMA	A	
8		U	AAAAUU	U	UJMAUU	AUU	MMUUU	UJMA	AU
4		QQUQUQQ	Q	AAAAUUUQUQ	UJMAUUUUQQQ	QAUUQ	QMMUUUUQQQUJMAUQQQAUU		
0		QQUQUQQQQQ	AAAAUUUQUQ	UJMAUUUUQQQ	QAUUQQQ	QMMUUUUQQQUJMAUQQQAUU			

Chart Start Date: Day #206

NOTES:

This graph is determined by plotting the greater of either the planetary A-index or the Boulder A-index. Graph lines are labelled according to the severity of the activity which occurred on each day. The left-hand column represents the associated A-Index for that day.
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,
J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

109						
108				*		
107				*		
106				*		
105				*		
104		*		*		
103		**		*		
102		****		**		
101		****	*	***		
100		*****	**	***		
099		*****	**	***		
098		*****	***	***		
097		*****	***	****		
096		*****	*****			
095		*****	*****	*		
094		*****	*****	**		
093		*****	*****	*	***	
092		*****	*****	*****		
091		*****	*****	*****		
090		*****	*****	*		
089		*****	*****	***		
088		*****	*****		*	
087		*****	*****		*	
086		*****	*****		*	
085		*****	*****	****		
084		*****	*****	*****		
083		*****	*****	*****		
082		*****	*****	*****		

```

081 | *****          ***** |
080 | ***** *          ***** |
079 | ***** ***** |
078 | ***** |
077 | ***** |

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Chart Start: Day #206

GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX

```

109 | ----- |
108 | * |
107 | ***** |
106 | ***** |
105 | ***** |
104 | ***** *** |
103 | ***** |
102 | ***** |
101 | ***** |
100 | ***** |
099 | ***** |
098 | ***** |
097 | ***** |
096 | ***** |
095 | ***** |
094 | ***** |
093 | ***** |

```

Chart Start: Day #206

NOTES:

The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun. The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

```

103 | ----- |
098 | * |

```


20%	*** *** *** *** *** *** *** *** *** *** ***	20%														
0%	*** *** *** *** *** *** *** *** *** *** ***	0%	*	*	*	*	*	*	*	*	*	*	*	*	*	*
-----	--- --- --- --- --- --- --- --- --- --- ---		-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHANCE OF	Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun		F	S	S	M	T	W	T	F	S	S				
VHF DX	Given in 8 hour local time intervals		AURORAL BACKSCATTER													

NOTES:

These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACTIVITY PREDICTIONS (24 SEP - 03 OCT)

High Latitude Locations

	EXTREMELY HIGH											
CONFIDENCE LEVEL	VERY HIGH											
-----	HIGH											
65%	MODERATE	***	**			*	***	*	*			
	LOW	***	***	***	***	***	***	***	***	***	***	***
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	--	--	--	--	--	--	--	--	--	--	--
	AURORAL INTENSITY	Fri Eve.	Sat Twilight	Sun Midnight	Mon Morn.	Tue Twilight	Wed Midnight	Thu Morn.	Fri Twilight	Sat Midnight	Sun Morn.	

Middle Latitude Locations

CONFIDENCE LEVEL ----- 65%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE											
	LOW	**	*					*	*			
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	--	--	--	--	--	--	--	--	--	--	--
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

Low Latitude Locations

[illegible]

-----	MODERATE													
80%	LOW													
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***	***	***
	-----	---	---	---	---	---	---	---	---	---	---	---	---	---
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun			
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight												

NOTE:

Version 2.00a of our Professional Dynamic Auroral Oval Simulation Software Package is now available. This professional software is particularly valuable to radio communicators, aurora photographers, educators, and astronomers. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **

Date: 23 Sep 93 21:28:38 GMT
From: ogicse!emory!wa4mei!ke4zv!gary@network.ucsd.edu
To: info-hams@ucsd.edu

References <9309211932.AA10879@maverick.aud.alcatel.com>,
<1993Sep22.120728.22045@lmpsbbbs.comm.mot.com>, <27s5v5\$rrq@gopher.cs.uofs.edu>
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: Antenna Covenants AGAIN (but now with

In article <27s5v5\$rrq@gopher.cs.uofs.edu> bill@triangle.cs.uofs.edu (Bill Gunshannon) writes:

>In article <1993Sep22.120728.22045@lmpsbbbs.comm.mot.com>,
burke_br@adcae1.comm.mot.com (Bruce Burke Sp App) writes:

>|>

>|> especially South Florida. The good news is that I saw on packet a first draft of a

>|> law that would make null and void the covenants and force the resonable

>|> allowance of Amateur Antennas.

>

>You should probably discuss this with a lawyer, but I don't think your likely to
>see this law pass. First, all existing covenants would have to be grandfathered
>because the Constitution prohibits "ex post facto" laws. That specifically means
>you can't make something illegal after the fact. And second, covenants are part

>of contract law. I hardly think the state of Florida is going to successfully,
>single-handedly re-write the concept of contract law.

In the case of the civil rights laws, covenants for whites only sales were voided. What "ex post facto" means is that the government can't pass a law and try you for something you did before the law was enacted. For example, if you erected a tower and the city later made erecting towers a criminal offense, they couldn't go back and try you under that new law. However, the city could enact a law banning towers. In that case, they could require you to take down an existing tower and prosecute you if you failed to comply. The difference is that offenses are only chargeable if they are committed after the law exists. So FLA couldn't make the signing of covenants before the new law was enacted illegal, but they could make any subsequent attempts at enforcement of the covenants illegal.

Government meddles in matters of contract law all the time. It's standard boilerplate in contracts to say things like "upon the repeal of the Taft Hartley Act, all employees must become members of the bargaining unit", or "no provision in this contract shall have force when it requires acts contrary to law."

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

End of Info-Hams Digest V93 #1132
